

1. what is software? what is software engineering ?

Ans:- Software: is a collection of computer programs and related data that provide the instructions for telling a computer what to do and how to do it.

Software Engineering:-

—Software engineering is the art of developing quality software on time and within budget.

Software Engineering is a systematic approach to the design, development, operation, and maintenance of a software system.

2. Explain type of software

1) System software / operating system.

2) Application s/w

3) Programming language

1) System s/w or OS:

- provides the basic functions for computer usage and helps to run the computer hardware and system.

- is the s/w used by the computer to translate inputs from various sources into a language which a machine can understand.

- Basically OS coordinates the different hardware components of a computer.

- Ex. Linux, window, macOS, Android, iOS

2) Application s/w:

- is the general designation of computer programs for performing user tasks.

3) Programming s/w:

- is the process of designing, writing, testing, debugging, and maintaining the source code of computer programs.

- This s/w is written in a programming language.

- The purpose of programming is to create a program that exhibits a certain desired behavior.

3. what is SDLC ? Explain its phase of SDLC.

SDLC is a structure imposed on the development of a software product that defines the process for planning, implementation, testing, documentation, deployment, and ongoing maintenance and support. There are a number of different development models.

Phase of SDLC:

1. Requirements Collection/Gathering - Establish Customer Needs

2. Analysis - Model And Specify the requirements-

3. Design - Model And Specify a Solution

4. Implementation - Construct a Solution In Software

5. Testing - Validate the solution against the requirements

6. Maintenance - Repair defects and adapt the solution to the new requirements

4. what is DFD? Create a DFD diagram on Flipkart

- DFD

- A Data Flow Diagram is a traditional way to visualize the information flows within a system.

It shows how information enters and leaves the system, what changes the information and where information is stored.

- The purpose of a DFD is to show the scope and boundaries of a system.

It may be used as a communication tool between a system analyst and any person who plays a part in the system that a

- It's easy to understand the flow of data through system with the right Data Flow Diagram Software.

This guide provides everything you need to know about data flow diagrams, including definitions, history, and symbols.

- It uses defined symbols like rectangles, circles and arrows.

DFD does not have control flow and no loops or decision rules are present.

Data Flow Diagrams are very popular because they help us to visualize the major steps and data involved in software-sy

Data Flow Diagrams can be divided into Logical and Physical.

5. what is flow chart? Create a flow chart to addition of two number.

- A diagram of the sequence of movements or actions of people or things involved in a activity.

- A Flow Chart is a Graphical or symbolic representation of a process.

Each step in the process is presented by a different symbol and contains a short description of the process step.

The Flow Chart symbols are linked together with arrows showing the process flow direction.

- A flowchart is a picture of the separate steps of a process in sequential order.

Types of flow chart:

- Data Flow Diagram (DFD)

- Process Flow Diagram (PFD)

- Business Process Model and Notation (BPMN)

- Specification and Description Language Flowchart (SDL)

Program can be in three forment:

1. Linear or Sequential Structure

2. Branching or Decision Making Structure

3. Looping Structure

6. what is use case diagram? Create a use-case on bill payment on Paytm.

- Use-case Diagrams describe the high-level functions and scope of a system.

- These diagrams also identify the interactions between the system and it's actors.

- The use cases and actors in use case diagrams describe what the system does and how the actors use it, but not how t

- Use-case diagrams illustrate and define the requirements of either an entire system or the important parts of the system